## CLAIMS

1. A titania-metal composite, characterized by containing titanium oxide fine particles doped with at least one out of copper, manganese, nickel, cobalt, iron, zinc, and compounds thereof.

2. The titania-metal composite according to claim 1, characterized in that said titanium oxide fine particles are amorphous-type and/or anatase-type modified with peroxy groups.

3. A titania-metal composite dispersion, characterized by containing the titania-metal composite according to claim 1 or 2.

4. A titania-metal composite dispersion, characterized by containing the titania-metal composite according to claim 1 or 2, and a prescribed additive.

5. The titania-metal composite dispersion according to claim 4, characterized in that said additive is a silicone oil of a silicone or a modified silicone having an alkylsilicate structure and/or a polyether structure.

6. The titania-metal composite dispersion according to any of claims 3 through 5, characterized in that a solvent of the titania-metal composite dispersion comprises water and/or an

alcohol.

7. A method of manufacturing an aqueous liquid having a titania-metal composite dispersed therein, characterized by reacting a tetravalent titanium salt solution and an ammonia aqueous solution together to form a titanium hydroxide, peroxidating the hydroxide with an oxidizing agent to form amorphous-type titanium peroxide, and further carrying out heating treatment to convert into anatase-type titanium peroxide, and in one of these processes mixing in at least one out of copper, manganese, nickel, cobalt, iron, zinc, and compounds thereof.

8. A method of manufacturing an aqueous liquid having a titania-metal composite dispersed therein, characterized by peroxidating a tetravalent titanium salt solution, reacting with an ammonia aqueous solution to form a hydroxide and thus form amorphous-type titanium peroxide, and further carrying out heating treatment to convert into anatase-type titanium peroxide, and in one of these processes mixing in at least one out of copper, manganese, nickel, cobalt, iron, zinc, and compounds thereof.

9. A method of manufacturing an aqueous liquid having a titania-metal composite dispersed therein, characterized by reacting together a tetravalent titanium powder or titanium oxide powder, hydrogen peroxide, and an ammonia aqueous solution to carry out titanium hydroxide formation and peroxidation simultaneously

and thus form amorphous-type titanium peroxide, and further carrying out heating treatment to convert into anatase-type titanium peroxide, and in one of these processes mixing in at least one out of copper, manganese, nickel, cobalt, iron, zinc, and compounds thereof.

10. A film formation method using a titania-metal composite dispersion, characterized by applying the titania-metal composite dispersion according to any of claims 3 through 6 onto a substrate surface to form a coating film on the substrate surface.

11. A film formation method using a titania-metal composite dispersion, characterized by permeating in the titania-metal composite dispersion according to any of claims 3 through 6 from a substrate surface to form a coating film on the substrate surface.

12. A substrate comprising an inorganic material, characterized by having fine particles of the titania-metal composite according to claim 1 or 2, or the titania-metal composite dispersion according to any of claims 3 through 6 mixed therein.

13. A substrate comprising an inorganic material, characterized by having a coating film formed on a surface thereof using the titania-metal composite dispersion according to any of claims 3 through 6.

14. A substrate comprising an organic material,

characterized by having fine particles of the titania-metal composite according to claim 1 or 2, or the titania-metal composite dispersion according to any of claims 3 through 6 mixed therein.

15. A substrate comprising an organic material, characterized by having a coating film formed on a surface thereof using the titania-metal composite dispersion according to any of claims 3 through 6.

16. The substrate comprising an inorganic material according to claim 12 or 13, characterized in that the substrate comprising an inorganic material is any of transparent or opaque glass, metal, a ceramic plate, stone, and concrete.

17. The substrate comprising an organic material according to claim 14 or 15, characterized in that the substrate comprising an organic material is any of a molded article, a coated surface, and a sheet comprising an organic polymer resin.

18. The substrate comprising an organic material according to claim 15, characterized in that the substrate comprising an organic material is an architectural or civil engineering sealing material.

19. A film formation method using a titania-metal composite dispersion, characterized by forming an intermediate film

comprising at least one out of silicones, silicone oils and silane compounds between a coating film formed using the titania-metal composite dispersion according to any of claims 3 through 6 and the sealing material according to claim 18.

20. A film formation method using a titania-metal composite dispersion, characterized by forming an intermediate film using the titania-metal composite dispersion according to any of claims 3 through 6 between a coating film having a photocatalytic function and an organic material substrate surface.